

c.) Amendments to the Claims

Claim 1. (currently amended) In a touch sensing system for identifying at least one active touch stimulating device, an apparatus for powering the active touch stimulating device, comprising:

a touch sensing area in which said at least one active touch stimulating device operates;

a transducer disposed operatively associated with said touch sensing area for transmitting a power signal to said at least one active touch stimulating devices;

each of said active touch stimulating devices including means for receiving said power signal and converting said power signal to electrical operating power for said active touch stimulating device;

said transducer includes a first antenna extending about the perimeter of said touch sensing area, and further including means for connecting said power signal to said first antenna to generate an EM power field across said touch sensing area ;

said at least one touch stimulating device including touch signaling means incorporating spread spectrum signals .

Claim 2. (previously amended) The apparatus for powering an active touch stimulating device of claim 1, wherein said at least one touch stimulating device includes a second antenna adapted to receive power from said EM power field within said touch sensing area.

Claim 3. (original) The apparatus for powering an active touch stimulating device of claim 2, wherein said second antenna is a resonant antenna tuned to the frequency of said EM field.

Claim 4. (original) The apparatus for powering an active touch stimulating device of claim 3, further including rectifying means connected to the output of said resonant antenna to generate operating power for said active touch stimulating device.

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Claim 5. (original) The apparatus for powering an active touch stimulating device of claim 3, wherein said resonant antenna includes an inductor coil and a capacitor connected to be tuned to the frequency of said EM field.

Claim 6. (canceled)

Claims 7-12. (withdrawn)

Claim 13. (currently amended) In a touch sensing system for identifying at least one active touch stimulating device, an apparatus for powering the active touch stimulating device, comprising:

a touch sensing area in which said at least one active touch stimulating device operates;

a transducer operatively associated with said touch sensing area for transmitting a power signal to said at least one active touch stimulating devices;

a conductive layer disposed within said touch sensing area, said transducer including at least one power signal transmitter coupled to said conductive layer to generate an EM field in said conductive layer;

each of said active touch stimulating devices including means for receiving said power signal and converting said power signal to electrical operating power for said active touch stimulating device ;

wherein said transducer includes at least one power signal transmitter coupled to peripheral portions of said conductive layer and controlled to establish an AC voltage gradient across said conductive layer ;.

said at least one touch stimulating device including a pair of contact points adapted to electrically engage said conductive layer, said pair of contact points being movable on said conductive layer and spaced apart to acquire a voltage differential from said voltage gradient in said conductive layer.

Claim 14. (canceled)

Claim 15. (canceled)

Claim 16. (currently amended) The apparatus for powering an active touch stimulating device of claim ~~15~~ 13, further including rectifying means connected to

said voltage differential to generate operating power for said active touch stimulating device.

Claim 17. (original) The apparatus for powering an active touch stimulating device of claim 13, wherein said touch stimulating device includes touch signaling means incorporating spread spectrum signals.

Claim 18. (currently amended) In a touch sensing system for identifying at least one active touch stimulating device in a touch sensing area, a method for powering the active touch stimulating device, comprising:

providing a first antenna extending about the perimeter of said touch sensing area, and driving said first antenna with a power signal to generate an EM power field within said touch sensing area;

providing each of said active touch stimulating devices with means for receiving the power signal from said EM field and converting said power signal to electrical operating power for said active touch stimulating device ;

said at least one touch stimulating device including touch signaling means incorporating spread spectrum signals.

Claim 19. (currently amended) In a touch sensing system for identifying at least one active touch stimulating device in a touch sensing area, a method for powering the active touch stimulating device, comprising:

providing a conductive layer said touch sensing area;

generating an EM field in said conductive layer, said EM field having a voltage gradient across said touch sensing area;

providing each of said active touch stimulating devices with means for receiving a power signal from said EM field and converting said power signal to electrical operating power for said active touch stimulating device ;

providing said at least one touch stimulating device with a pair of contacts adapted to translate on said conductive layer and electrically engage said conductive layer and pick up a voltage differential from said EM field in said conductive layer.

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Claim 20. (canceled)

Claim 21. (currently amended) The method for powering an active touch stimulating device of claim ~~20~~ 19, further including the step of providing said at least one touch stimulating device with a rectifier for receiving said voltage differential and generating DC operating power.

Claims 22-23. (withdrawn)
